

**ABSTRACT**

A method and apparatus for using information about a mobile terminal's location relative to a base station can improve performance of a communication system. In addition, information about the mobile terminal's velocity relative to the base station may be used to improve performance of the communication system. The location information may be used to estimate a nominal PN offset, and a set of PN offset to use, for processing communication signals. The velocity information may be used to estimate a nominal frequency of the communication signals.